



OHSEA, What's Next? Colloquium

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Cambodia Soil monitoring: Data Collection and Analysis

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Site Selection

The resources used to guide soil sampling site:

- Rice soils map (Oberthur *et al.* 2000)
- Geology map (MRC)
- Digital elevation models (MRC)
- US Army Corp topography maps (1:50,000; 1967)
- Digital ortho-rectified aerial photographs
(Department of Geography 1:50,000: 1992).

Soil sampling and data collection

1, Making Soil Pits: Making soil pit with 0.6-1.2m depth.

2, Auger Coring:

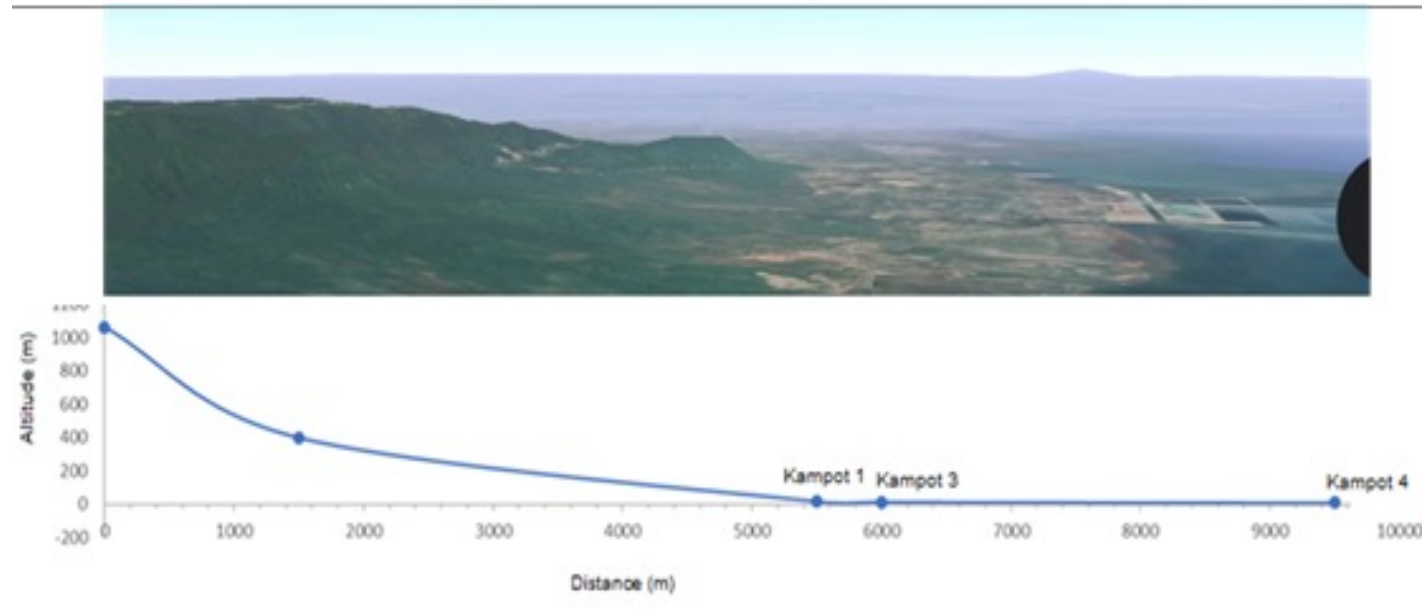
Soil cores of about 60 - 80 cm in depth were taken out and analyzed for their variations in soil texture, color etc.



Data to be collected

1. Site information data:

- Location and Identification: GPS coordinate, Village, Commune, District, etc.
- Landscape features: slope class, landform pattern,
- Land use: Crop types



Data to be collected

2. Soil physical data

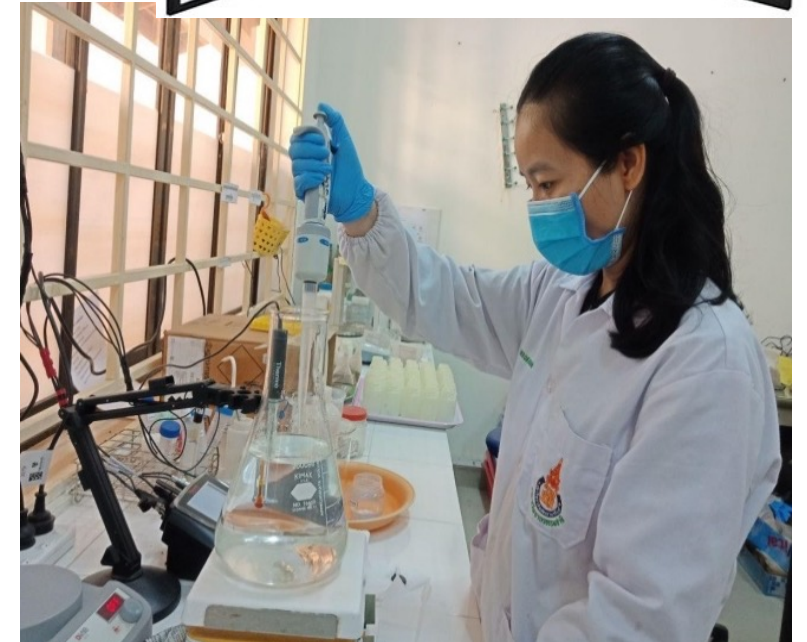
In the field: Soil texture, colour, structure.

In in the lab: PSA, Bulk density, water holding capacity, bulk density.

3. Soil chemical data

In the field: pH (soil test kid)

In the Lap: pH, EC, C, N, P, K, CEC, Al.



Data Storage

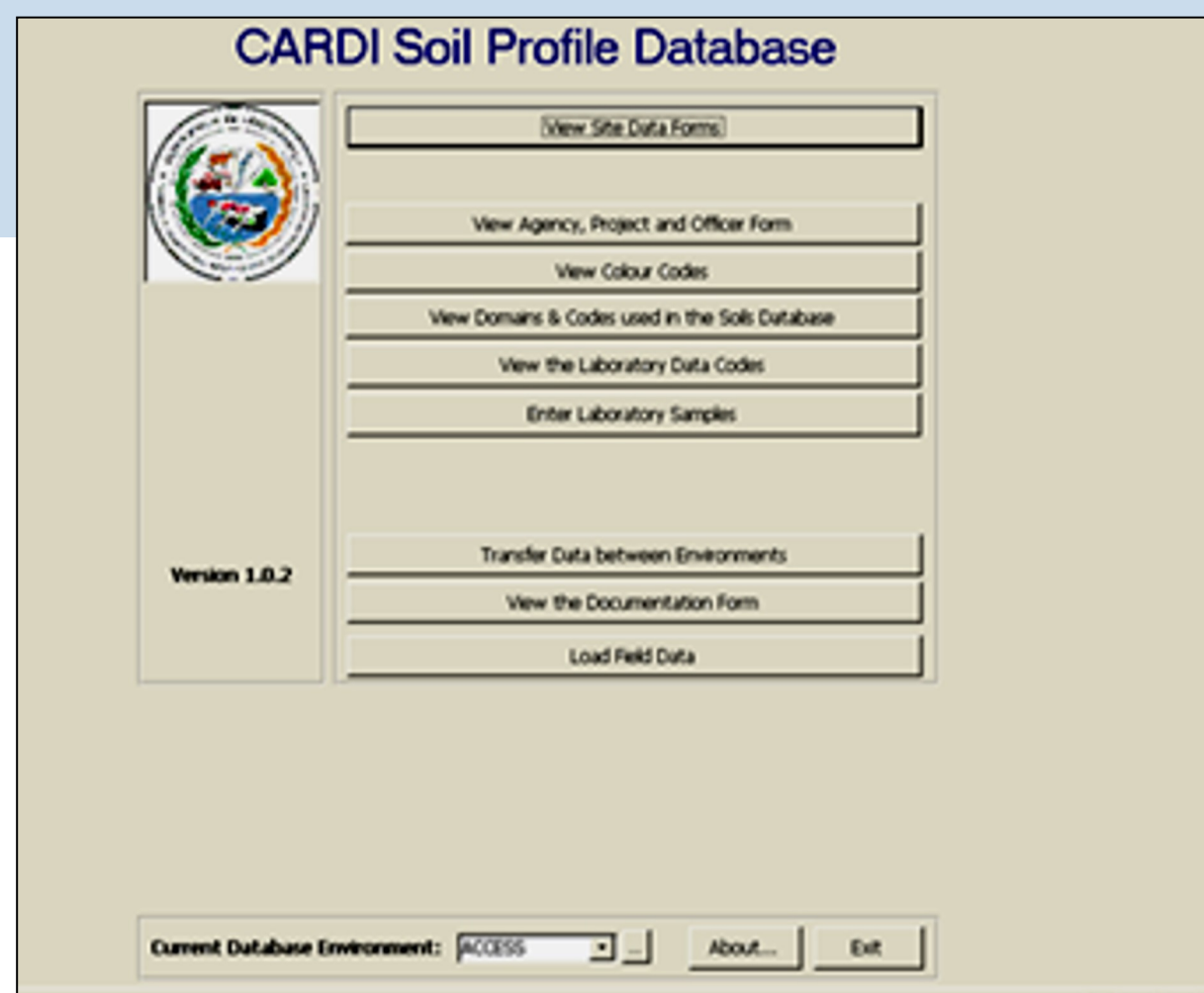
Cambodian Soil database system:

All site information and soil data are stored in the **CARDI Soil Database System** in CARDI.

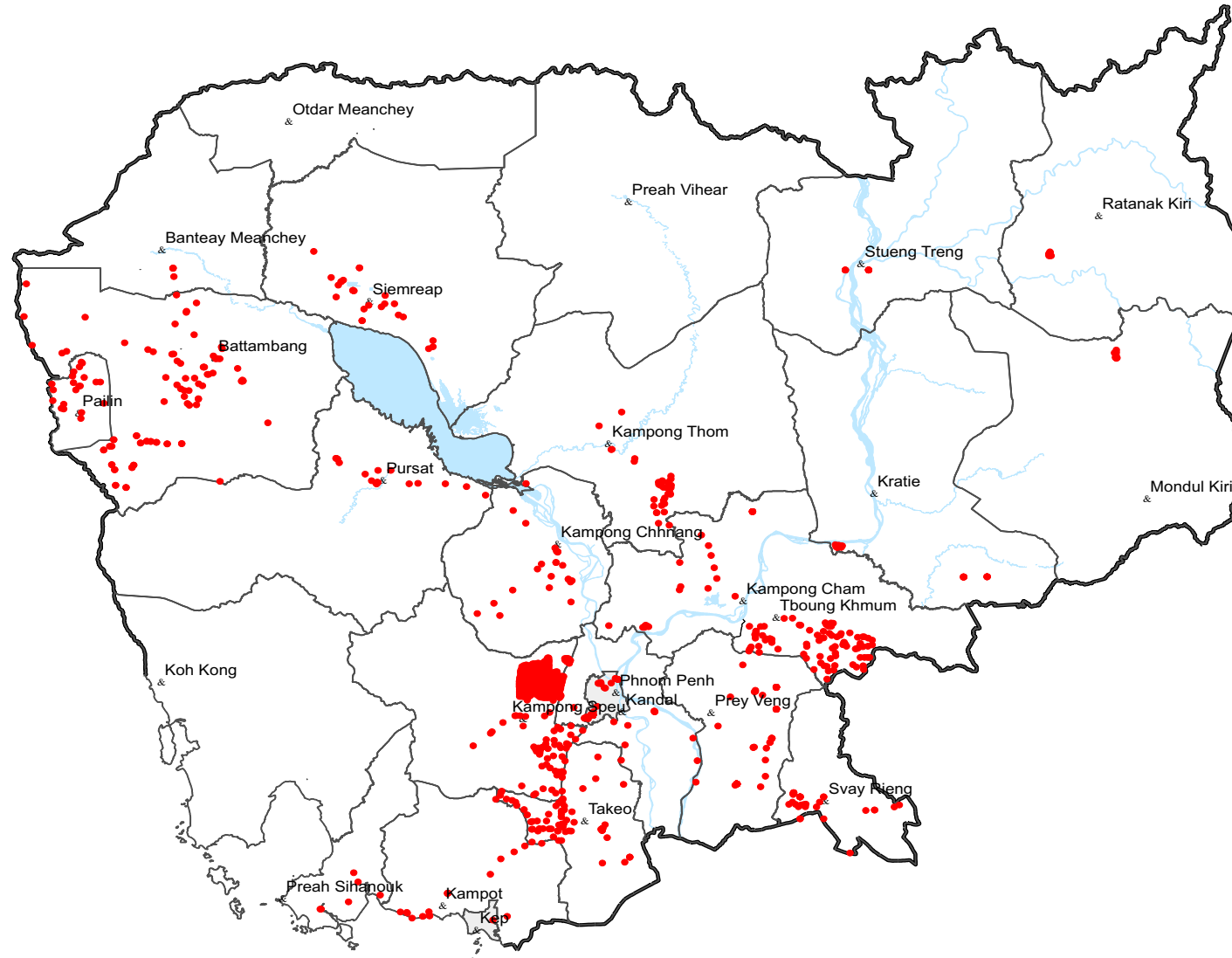
** After every data entry, the database have to be unloaded on G-drive.*

At the present soil data of > 2,200 sites are stored in the soil database.

- Around 500 sites were collected by CARDI.
- Remaining sites by other organizations.



Location of Soil data collection Sites



Map of Cambodia showing locations of soil data collection sites

Photos of soil sampling and data collection activities



**THANK YOU
FOR
YOUR ATTENTION**